



MSOSFBINST 16711.1

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MARINE SAFETY OFFICE SAN FRANCISCO BAY INSTRUCTION 16711.1

Subj: Designation of Waters and Harbors of Safe Refuge for the Application of Subdivision and Stability Criteria

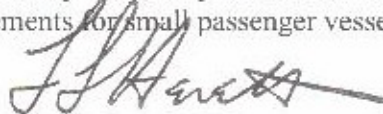
Ref: (a) Title 46 Code of Federal Regulations (46 CFR) – Subchapters T and S
(b) CID Memo 40, Inspection Casework Documentation and Submission

1. PURPOSE: This instruction designates harbors of safe refuge and establishes the boundaries for waters designated as either exposed, protected or partially protected within the Officer in Charge, Marine Inspection (OCMI) San Francisco Bay zone.
2. DISCUSSION: The Coast Guard conducts stability tests to determine if a small passenger vessel, as built and operated, has a minimum level of initial stability for its intended route and service. The Coast Guard also requires these vessels to have a minimum level of watertight integrity, which includes requirements for collision bulkheads, watertight bulkheads, coamings, hull openings and weatherdeck drainage. The level of exposure to heavy weather or other special hazards that a vessel may encounter during its intended route influences the level of stability and watertight integrity that will be required. An important factor in determining the expected exposure to heavy weather is the distance to the nearest harbor of safe refuge. The harbors of safe refuge have an important role in defining the boundaries of the various route endorsements, and the boundaries of the various water designations. Specifically, harbors of safe refuge will determine where the boundaries lay between limited coastwise and coastwise routes, and also where the boundaries lay between exposed and partially protected waters. The requirements for stability and watertight integrity lessen as routes become more sheltered from exposed to partially protected to protected in nature. This is also true for other vessel safety related items, such as the levels and types of lifesaving equipment required onboard. In order to apply these requirements appropriately to a vessel, it is important to know the vessel's route as endorsed on the Certificate of Inspection (COI), as well as the designation of the waters that are covered within that route. The following paragraphs provide guidance with regard to the respective water body designations, harbors of safe refuge, and route endorsements within the San Francisco Bay OCMI zone.
3. DESIGNATIONS:
 - a. Exposed waters. This area is defined by the CFR as waters more than 20 nautical miles from a harbor of safe refuge. These waters typically correspond with the areas covered by oceans and coastwise routes as described in reference (b). This environment represents the most challenging conditions that a vessel may face in terms of stability, integrity, and

distance from safe haven. As a result, vessels operating in exposed waters will have the most stringent safety requirements.

- i. Coastal waters beyond twenty miles from a harbor of safe refuge. Within the San Francisco Bay OCMI zone, all waters more than 20 miles from a harbor of safe refuge are now considered exposed. Historically, vessel transits to the Farallon Islands and Cordell Banks were allowed as part of a limited coastwise route endorsement. Vessels operating under this endorsement were required to undergo stability tests using the less stringent partially protected criteria. Both locations, however, are more than 20 miles from the nearest harbors of safe refuge. Under this instruction, transits to the Farallon Islands and Cordell Bank will now require a coastwise route endorsement, and will no longer be permitted under a limited coastwise route. Transits to these locations will require vessels to be evaluated for stability using the exposed waters criteria. The amended route endorsements will be implemented during 2001 and will be updated in reference (b).
 - ii. Coastal waters less than twenty miles from a harbor of safe refuge: The cognizant OCMI can also designate waters less than 20 miles from a harbor of safe refuge as exposed if those areas are not considered partially protected because of hazards present due to weather or special circumstances. Within the San Francisco Bay OCMI zone, there are no waters less than 20 miles from a harbor of safe refuge that have been designated as exposed.
- b. Partially Protected. This area is defined by the CFR as waters not more than 20 nautical miles from the mouth of a harbor of safe refuge, unless determined by the cognizant OCMI to be exposed waters.
- i. Coastal Waters. Within the San Francisco Bay OCMI zone, all offshore waters less than 20 miles from the mouth of a safe harbor of refuge for a particular vessel are considered partially protected. These waters also typically correspond with the areas covered by limited coastwise routes as described in reference (b).
 - ii. Harbors of Safe Refuge. The designation of a location as a harbor of safe refuge is dependent upon its suitability as a place of shelter for a particular vessel. As such, a harbor of safe refuge for one vessel may not be appropriate for another. However, for the purposes of most small passenger vessels, harbors of safe refuge include (but are not necessarily limited to) Monterey Bay, Moss Landing, Santa Cruz, Half Moon Bay, San Francisco Bay, Bodega Bay, Mendocino Bay, the Noyo River, Humboldt Bay, and Crescent City Harbor. As such, all coastal waters within a 20 miles radius of these locations are considered partially protected in nature. Tomalas Bay and Drakes Bay are not suitable as harbors of safe refuge. Ano Nuevo Island, located north of Santa Cruz and south of Half Moon Bay, is also not considered a harbor of safe refuge. It is recognized, however, that this location does provide a place of temporary shelter from winds out of the northwest. Whereas Ano Nuevo may be used as a place of limited shelter during the summer months (when the prevailing weather patterns are from the northwest), vessels on limited coastwise route will be allowed to transit up to three miles from shore in this area. This is an extension of the limited coastwise route since the Ano Nuevo area is more than twenty miles from the two nearest harbors of safe refuge (Santa Cruz and Half Moon Bay).

- iii. Inside San Francisco Bay. Partially protected waters may also include portions of rivers, estuaries, harbors, lakes and similar areas that the cognizant OCMI determines are not protected in nature. Due to the open water characteristics of the greater San Francisco Bay, all waters within the Bay located west of the Carquinez Bridge are considered partially protected. This area includes the waters of the Carquinez Straits west of the Carquinez Bridge, San Pablo Bay, San Rafael Bay, San Pablo Straits, Richardson Bay, Raccoon Strait, and the waters of the Central San Francisco Bay from the Golden Gate to the eastern boundaries of the Bay, and southward to the Dumbarton Bridge. Vessels operating in these areas under a Lakes, Bays, and Sounds route will apply the stability and subdivision criteria for partially protected waters rather than protected waters.
- c. Protected. This area is defined by the CFR as sheltered waters presenting no special hazards, including rivers, harbors, and lakes that have not been determined by the cognizant OCMI to be exposed or partially protected waters. Within the San Francisco Bay area, all waters located east of the Carquinez Bridge are considered protected. This area includes the Carquinez Straits, the Sacramento River, the San Joaquin River, and the Sacramento/San Joaquin Delta. Certain areas west of the Carquinez Bridge may be considered protected waters due to their sheltered nature, including Mare Island Strait, the Napa River, the Petaluma River, Redwood Creek, and San Leandro Bay. Another area outside the greater San Francisco Bay that is considered protected waters is Humboldt Bay.
- 4. ACTION: The waters and harbor of safe refuge designations as contained in this instruction should be used to guide unit personnel in their application of route endorsements, lifesaving requirements, simplified stability tests, simplified subdivision requirements, and other watertight integrity requirements for small passenger vessels.



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- Encl (1): Chart of Limited Coastwise, not more than three miles from shore
 (2): Chart of Limited Coastwise, within 20 miles of a harbor of safe refuge
 (3): Chart of Coastwise, not more than 20 miles from the mainland shore